CHAPTER 5 - GLOSSARY

Beach The strip of land that directly abuts the water's edge of an ocean or lake.

Berm A bank or mound of compacted earth, usually placed against a

foundation wall.

Blowout Plug A designed "weak" spot in a basement wall or floor that will fail first due to

hydrostatic force, thus preventing total failure of the wall or floor.

Borrow Area An area where material has been excavated for use as fill at another

location.

Building Code Regulations adopted by local governments that establish standards for

construction, modification, and repair of buildings and other structures.

Buoyancy Forces that cause a structure to float.

Caulking Flexible material used to fill joints in a structure, such as around

windows or doors, which is able to resist the passage of moisture.

Check Valve A type of valve that allows water to flow one way but automatically

closes when water attempts to flow in the opposite direction.

Closure A shield made of strong material, such as steel, aluminum, or wood,

used to temporarily fill gaps in floodwalls, levees, or dry flood proofed structures and protect against water entrance through areas that have been left open for day-to-day convenience at entrances such as doors

and driveways.

Column An upright support unit for a structure that is set in predug holes and

backfilled with compacted material. Columns are usually of concrete

or masonry construction with steel reinforcement. Columns are

sometimes referred to as posts.

Crawl Space The area between the ground surface and the bottom of the first floor

of an elevated structure. The structure is elevated a minimal distance

above the ground so access under the structure is by crawling.

Debris Flow See Mudflow.

Debris Impact Sudden loads induced on a structure by debris carried by floodwater.

Dry Flood A method used in areas of low-level flooding to completely seal a **Proofing** structure against water by making the structure substantially

structure against water by making the structure substantially impermeable to the passage of water.

Elevation The raising of a structure to place the lowest floor at or above the

flood protection elevation on an extended support structure.

Erosion The action of moving water against soil where the soil particles are

translocated by the moving water to another location.

Event An occurrence of flooding.

Extended The construction of an additional wall to gain height above the

Foundation Wall existing foundation walls in order to elevate a structure to or above the

design flood elevation.

Fill Material such as earth, clay, or crushed stone that is placed in an area and compacted to increase ground elevation.

Flash Flood A flood that crests in a short length of time and is often characterized

by high-velocity flow. It is often the result of heavy rainfall in a

localized area.

Flood A partial or complete inundation of normally dry land areas from the

overland flow of a lake, ocean, river, stream, ditch, etc.

Flood Crest The maximum height of a flood event at a particular location.

Flood Depth The height difference between the flood elevation and the lowest

grade adjacent to the structure.

Floodflow A term used to refer to the movement of floodwater.

Floodshield See Closure.

Floodwall A constructed barrier of resistant material, such as concrete or

masonry block, designed to keep water away from a structure.

Footings The enlarged base of a foundation wall, pier, or column designed to spread

the load of the structure so that it does not exceed the soil-bearing capacity.

Foundation

Wall

A support structure that connects the foundation (the building substructure)

to the main portion of the building (the building superstructure).

Freeboard An additional amount of height used as a factor of safety in determining

the design height of a flood protection measure to compensate for unknown

factors such as wave action, the hydrologic effect of urbanization, etc.

Grade The elevation of ground adjacent to a structure.

Grouting The practice of filling the holes in concrete blocks with concrete to

increase the strength of a concrete block floodwall.

Human The required presence and active involvement of people to enact any

Intervention type of flood proofing measure prior to flooding.

Hydrodynamic

Force

Forces imposed on an object, such as a structure, by water moving around it. Among these loads are positive frontal pressure against the

structure, drag effect along the sides, and negative pressure on the

downstream side.

Hydrostatic

Force

Forces imposed on a surface, such as a wall or floor slab, by a standing mass of water. The force increases with increasing water

depth.

Interior Grade

Beam

A section of a floor slab that has a thicker section of concrete to act as

footings to provide stability under load-bearing or critical structural walls.

Internal

Drainage

Water that enters a protected area by rainfall or seepage.

Levee A barrier of compacted soil designed to keep floodwater away from

a structure.

Loads Forces imposed on a surface such as a wall or floor, an entire structure,

or on the ground.

Lower Area The area that exists between the elevated floor and "grade" of an

elevated structure.

Measure This refers to an individual flood proofing method.

Mud Flooding Floodflows that contain sediment and debris to such an extent that the sediment

and debris "solids" by volume range between 20 and 45 percent of the total

floodflow volume.

Mudflow Floodflows that contain sediment and debris to such large extent that the sediment

and debris "solids" by volume exceed 45 percent of the total floodflow volume. The "debris" can contain extremely large boulders that can be floated by this type

of floodflow.

Moment The product of a force and its perpendicular distance from its axis.

Perimeter A wall made of concrete that projects downward from the edge of a

Footing concrete slab into the earth.

Permeability The property of soil or rock that allows water to pass through it.

Pier An upright support member of a building that is designed and constructed to

function as an independent structural element in supporting and transmitting

building and environmental loads to the ground.

Pile An upright support member of a building that is usually long and slender in

shape, driven or jetted into the ground by mechanical means, and primarily

supported by friction between the pile and the surrounding earth.

Piping The passage of water through an embankment of earth that beginsextremely

slow with gradual wetting of the earth and proceeds to increase gradually in

flow until flood protection failure occurs.

Post A long, upright support unit for a building that is set in predug holes and backfilled

with compacted material. Each post usually requires bracing toother units. Posts

are also known as columns, although posts are usually made of wood.

Protected Area That area protected from flooding by a flood proofing measure such as

a levee or floodwall.

Rebar Steel rods that are placed inside poured concrete and become an

integral part of the concrete to give it added strength.

Relocation Moving a structure from a flood-prone area to a new location,

normally to one where there is no threat of flooding.

Riprap Broken stone, cut stone blocks, or rubble that is placed on slopes to

protect the slopes from erosion or scour caused by floodwaters or

wave action.

Scour The localized erosion around floodflow obstructions caused by the

movement of soil or sediment by high-velocity water.

Seepage Water that leaks through or under a flood proofing measure such as a

levee or floodwall.

Slab-on-Grade A structural design where the first floor is located on a poured

concrete slab that sits directly on the ground.

Spread Footing See Footings.

Storm Surge The maximum water surface elevation in coastal areas resulting from

hurricane force winds driving ocean water upward over areas above

mean sea level.

System A combination of flood proofing measures.

Wave Runup See Storm Surge.